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ATT 34 AMDT

Claims

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1. A transgenic plant cell which is genetically modified, wherein the genetic modification is an introduction of a foreign nucleic acid molecule whose presence or expression leads to an increase in the plastidial ADP/ATP translocator activity in comparison with corresponding non-genetically modified plant cells from wild type plants.
 2. The transgenic plant cell according to claim 1, wherein the foreign nucleic acid molecule encodes a plastidial ADP/ATP translocator.
 3. The transgenic plant cell according to claim 2, wherein the nucleic acid molecule encodes a plastidial ADP/ATP translocator from *Arabidopsis thaliana*.
 4. The transgenic plant cell according to any one of claims 1 to 3 exhibiting an increased yield in comparison with corresponding non-genetically modified plant cells.
 5. The transgenic plant cell according to *any one of claims 1 to 4* exhibiting an increased oil and/or starch content in comparison with corresponding non-genetically modified plant cells.
 6. The transgenic plant cell according to *any one of claims 1 to 5* synthesizing a starch exhibiting an increased amylose content in comparison with starch from corresponding non-genetically modified plant cells.
 7. A transgenic plant containing transgenic plant cells according to *any one of claims 1 to 6*.
 8. The transgenic plant according to claim 7, which is an oil and/or starch storing plant.
 9. The transgenic plant according to claim 8, which is a maize, rape, wheat or
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ART 34 AND 1

- Sub B 2*
- potato plant.
10. A method for the production of a transgenic plant exhibiting an increased yield in comparison with wild type plants, wherein
- (a) a plant cell is genetically modified by means of introduction of a foreign nucleic acid molecule whose presence or expression leads to an increase in the plastidial ADP/ATP translocator activity in the cell;
 - (b) a plant is regenerated from the cell produced according to step (a); and
 - (c) further plants are optionally produced from the plant produced according to step (b).
11. The method according to claim 10, wherein the transgenic plant exhibits an increased oil and/or starch content in comparison with wild type plants and/or whose starch exhibits an increased amylose content in comparison with starch from wild type plants
12. A transgenic plant obtainable by the method according to claim 10 or 11.
- Sub B 3*
13. Propagation material of plants according to any one of claims 7 to 9 or 12, wherein said propagation material contains transgenic cells according to any one of claims 1 to 6.
14. Use of nucleic acid molecules encoding a plastidial ADP/ATP translocator for the production of transgenic plants exhibiting an increased yield in comparison with wild type plants
15. The use according to claim 14, wherein the transgenic plant exhibits an increased oil and/or starch content and/or synthesizes a starch exhibiting an increased amylose content in comparison with starch from wild type plants.
16. A method for the production of a modified starch comprising the extraction of the starch from a plant according to any one of claims 7 to 9 or according to claim 12.
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